

Title (en)
SWITCHABLE MECHANICAL COOLANT PUMP

Title (de)
UMSCHALTBARE MECHANISCHE KÜHLMITTELPUMPE

Title (fr)
POMPE DE LIQUIDE DE REFROIDISSEMENT MÉCANIQUE COMMUTABLE

Publication
EP 2882946 B1 20161012 (EN)

Application
EP 12748198 A 20120813

Priority
EP 2012065815 W 20120813

Abstract (en)
[origin: WO2014026705A1] The present invention refers to a switchable mechanical coolant pump (10) for an internal combustion engine for providing a coolant for an internal combustion engine. The switchable mechanical coolant pump (10) comprises a pulley wheel (62) supported by a co-rotating hollow shaft (64). The pulley wheel (62) is rotatably supported by a static pump body (50). The pump wheel (30) is directly and rotatably connectable to a separate driving shaft (54). An actuation rod (20, 20') is rotatably and axially shiftable arranged inside the driving shaft (54), whereby the actuation rod (20, 20') is axially shiftable by an actuation means (72) between an engaged position (20') and a disengaged position (20). The pump (10) is provided with a clutch arrangement (36) defines by radial clutch grooves (22) at the pump wheel (30), radial clutch grooves (23) at the driving shaft (54), and a radial locking bolt (26) at the actuation rod (20, 20'). The locking bolt (26) engages the clutch grooves (22, 23) of the pump wheel (30) and the driving shaft (54) in the engaged position (20') of the actuation rod (20, 20').

IPC 8 full level
F01P 5/12 (2006.01); **F04D 13/02** (2006.01); **F04D 29/043** (2006.01); **F16D 11/14** (2006.01); **F16D 25/064** (2006.01); **F16D 25/08** (2006.01)

CPC (source: EP)
F01P 5/12 (2013.01); **F04D 13/021** (2013.01); **F04D 29/043** (2013.01); **F16D 11/14** (2013.01); **F16D 27/118** (2013.01); **F16D 2300/24** (2013.01)

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
WO 2014026705 A1 20140220; EP 2882946 A1 20150617; EP 2882946 B1 20161012

DOCDB simple family (application)
EP 2012065815 W 20120813; EP 12748198 A 20120813